

Society Reports.

AMERICAN NEUROLOGICAL ASSOCIATION.

*Twenty-third Annual Meeting, held at St. John's Parish Hall,
Washington, D.C., May 4th, 5th and 6th, 1897.*

The President, Dr. M. A. Starr, in the chair.

EPILEPSY FOLLOWING INFANTILE CEREBRAL PALSY. IMPROVEMENT AFTER CRANIOTOMY AND EVACU- ATION OF A SUBCORTICAL CYST.

Dr. Wm. M. Leszynsky, of New York, reported a case of a boy fourteen years old. At the age of two years, without known cause, general convulsions and unconsciousness occurred, being rapidly followed by left hemiplegia which still exists. Epilepsy was first manifested in his twelfth year. In the beginning the attacks were limited to conjugate deviation of the eyes and head toward the paralyzed side, with momentary loss of consciousness. These attacks increased in frequency. Later, the seizures were accompanied by rigidity of the left arm, then of the arm and leg, and ultimately there were general tonic convulsions and increasing mental enfeeblement. There was no clonic spasm at any time while under observation. After nearly a year of ineffectual hygienic and medicinal treatment an exploratory operation was advised. An opening was made in the skull over the right Rolandic area, and a large subcortical cyst was found in this region. This was completely evacuated after free incision through the extremely atrophied cortex. The brain tissue was sutured with catgut, the wound closed in the usual manner, and the patient made a prompt and uneventful recovery from the operation.

This was followed by absence of epileptic attacks for three and a half months. He then had seven general con-

vulsions, tonic in character, within eighteen hours. The cyst, which had refilled, was emptied by aspiration, and the attacks disappeared for more than three months. Again the cyst was evacuated. Bromide was subsequently administered, and under its continued use there have been only occasional mild attacks. The boy's general and mental condition have undergone considerable improvement. The speaker referred to the advisability of permanent drainage in such cases.

Dr. J. W. Putnam:—In reference to the question of convulsions being caused by pressure from a cyst, I can say that three or four years ago I had a patient, a boy between two and three years old, in whom the first convulsion was caused by trauma of the head from a fall. Some time afterwards convulsions developed. There was a second trauma from a fall in one of these convulsions. Operation was performed first over the point of injury, where he had fallen forward and struck his forehead, and a large amount of fluid was evacuated from the cyst. The fluid soaked through the thick dressing for several days. It was impossible to keep a record of the number of attacks of convulsions that the child had. They numbered fifteen to twenty in an hour. It was said that he had sometimes as many as sixty or eighty in the course of the day. That boy had a continuous loss of fluid for a week. Then the wound healed and there was no more discharge, and the patient had no convulsions for a period of several weeks, after which time they returned with the same violence and frequency. Dr. Parmenter, who made the first operation, also made the second, and we again evacuated the fluid and put in catgut and allowed drainage to go on as long as the fluid continued to flow. The convulsions commenced after a time as the flowing of the fluid ceased, and a third time the opening of the old wound was necessary. The child was last heard from six months ago and had had no convulsions whatever for two years.

Dr. Angell:—Three years ago I reported a case of imbecility and epilepsy in a child on whom craniotomy had been performed. I have recently heard from that child and desire to record the result, which has been successful after an interval of three years. Since the operation he has not had an attack of epilepsy, and there has been a steady, though rather slow, improvement in his mental condition. His habits are no longer vicious and he is gradually acquiring some knowledge and is able to take proper care of himself, and in all ways he is in a condition of satisfactory development. The pathologic condition was a hemorrhagic meningeal cyst, which offers one of the most promising opportunities for surgical interference.

In the case of subcortical cyst reported by Dr. Leszynsky, I should think that he would have to remove a portion of the cyst wall if he wished to obtain relief from the attacks.

Dr. Pershing:—Six years ago I reported the case of a man who had had a blow on the head, and some time afterwards began to have attacks of Jacksonian epilepsy. A cyst about an inch and a quarter deep was found under the upper face centre, and was drained. At the time the case was reported here only about three months had elapsed since the operation. I heard from the patient for a year after the operation, and he had no return of the attacks. After that I lost sight of him.

Dr. Worcester:—I have had one case of epilepsy, which I considered to be due to a brain cyst, in a negro, who had no paralysis at all. I found at the necropsy a cyst containing, I should think, three drachms of fluid and situated on the surface of the left frontal lobe. This seems to me to have probably been the cause of his convulsions, although there was nothing localizing in his movements.

I have had the opportunity of making seven autopsies in cases of infantile cerebral palsies, and as autopsies in these cases are not very frequently reported, perhaps it would be proper for me to speak of what I found, because the findings were very uniform. In all but one there was very great asymmetry of the hemispheres, and I am inclined to think that I may have overlooked some asymmetry in the first one, as I was not expecting to find it. There was great asymmetry of the optic thalami in that case, and the cornu ammonis of the left side was sclerotic. In four of the others the asymmetry was mainly observed in the external surface; that is, the affected hemisphere was very much smaller than the other, and the optic thalamus, and to a less extent the corpus striatum, were atrophied. In the other two cases the ventricles were very greatly dilated. In one, the brain, when exposed, showed but little difference in the two sides, but the greater part of one hemisphere was not more than one-fourth to one-half an inch thick, and the corpus callosum was reduced to a transparent membrane. In the other case the dilatation was not so great in the anterior cornu of the ventricle, but the posterior portion of the ventricle was greatly dilated, and the wall of the hemisphere greatly thinned in one place, where the external wall of the ventricle was reduced to a translucent membrane.

I judge that this must be a very common condition in such cases, and of course in cases of that sort I do not suppose that any benefit could be anticipated from operation. I speak of these cases especially with reference to the matter of prognosis in regard to operations.

The President:—I have not drained a cyst permanently; I have seen cysts drained as long as three months, and that is the

longest. My experience with cysts is an unfortunate one. I have seen the symptoms return so many times after the removal of the fluid from the cyst that I think it is useless to open them. The only thing that is of service, is to keep the cyst open so that it fills up from the bottom. In the long run operations on cysts of the brain, whether of traumatic or unknown origin, are almost futile. I base this statement on my experience in eight cases; two of them, which have been operated on within three months in spite of my semi-approval of the operation, have shown that it is practically useless, and in none has there been permanent recovery from the epilepsy.

Dr. Wm. M. Leszynsky, of New York:—We all know that, as a rule, these are the most unfortunate cases for surgical treatment. However, in a case of this character, I think we are justified in recommending an exploratory operation.

In the case reported, considerable relief followed each evacuation of the cyst, and the improvement has been permanent.

Dr. Graeme M. Hammond read by title a

REPORT OF A CASE OF JACKSONIAN EPILEPSY, RELIEVED BY AN OPERATION.

Dr. Chas. L. Dana, of New York, read by title the following paper:

TWO CASES OF BASEDOW'S DISEASE, WITH AUTOPSIES.

Dr. Samuel Ayres, of Pittsburg, read a paper entitled:

AN UNCOMMON NASAL PARESTHETIC NEUROSIS.

Dr. Baker:—A patient of mine, a woman approaching the menopause, has a similar sensation in the tongue, recurring attacks of fullness and pain, and disagreeable sensations in the tongue, that come and go. Sometimes they will be absent for a number of weeks, then, again, they will recur frequently for a few days, and then will be followed by a longer period of decline and a final subsidence, and so on.

I have always found in the management of her affection that sharp faradization of the tongue stops the attack. She is of a neurasthenic constitution and degenerate type. I have no

theory to advance. The thought occurred to me that possibly the condition of the nose in the patient of Dr. Ayres may be allied to that condition of flushing of the eyes and smarting of the lids which is found connected with the rheumatic or gouty diathesis. If I had such a case I should attempt to treat it with this idea in mind.

Dr. E. W. Taylor, of Boston, read by title a paper on
FIVE DEFECTIVE BRAINS.

These brains were all taken from persons who showed more or less unmistakable signs of insufficient mental development. The exact determination of mental deficiency was, in certain of the cases, difficult, owing to the extreme youth of the patients. The brains show marked alteration in gross structure, to which fact we desire now to call special attention, rather than to the more fundamental microscopical alterations, which it is hoped may form part of a more complete piece of work to follow this preliminary report.

Case I.—The brain is from a young child from the Infants' Hospital, who was supposed to have suffered a fracture of the skull in the frontal region. Operation was performed and was followed by death. The brain presents a remarkably symmetrical, bilateral agenesis of the frontal lobes, of the type of microgyria. The remainder of the brain, macroscopically, is essentially normal. The sharp line of demarcation between the atrophied and the normal convolutions, suggesting an intra-uterine affection of the anterior, and part of the middle cerebral arteries, as the cause of the maldevelopment, is of particular interest. The resemblance of this brain to that of the higher apes is exceedingly striking.

Case II.—This brain is from a microcephalic idiot of twenty years, who had neither spoken nor walked during life. The specimen shows a defective development of both hemispheres, but chiefly of the left. Microgyri were marked in the occipital region. The fissure of Rolando and the general arrangement of the convolutions are entirely anomalous. Of chief interest is the extreme thinning of the wall of the hemispheres in both parieto-occipital regions, again most markedly in the left, with a con-

sequent dilatation of the posterior horns of the lateral ventricles. The brain does not cover the cerebellum, which is well developed.

Case III.—The brain is from an infant of approximately eight months, from the Infants' Hospital. Clinically, the child showed signs of defective mental development, which was associated with frequent convulsive seizures of a peculiar character.

The necropsy showed a brain practically non-convoluted, a condition which we believe to be of most extreme rarity. There are no marked gross defects in this case; the cerebellum is well covered by the hemispheres, and the island of Reil is not exposed. Apart from the fissure of Sylvius, which naturally must be present, and the first temporal sulcus, there are no fissures nor sulci whatever on the convexities of the brain, except a few shallow and anomalous furrows. The fissure of Rolando is absolutely lacking. The brain has the general appearance of being covered with plaster. The mesial aspect of the hemispheres is slightly fissured, as is also the base. The cerebellum and brain stem are normal in appearance.

Case IV.—The brain is from a child of two years, from the Infants' Hospital. There had been marked mental defects. Operation of craniotomy was performed and repeated, but death occurred after the second operation.

The specimen is also one of great rarity, though not so unusual as the one preceding. There is complete absence of both cerebral hemispheres, with the exception of imperfect occipital lobes, and a small portion of the temporal lobes. The central ganglia are present; the optic thalami are poorly developed; the cerebellum is well formed and of normal size; the pons is small, and agenesis of the pyramidal tracts is observed in the medulla oblongata.

Case V.—The brain is from a microcephalic child of three months, from the Infants' Hospital. In this case a small tumor, apparently connected with the dura mater, projected from the vertex of the skull. Operation for its removal resulted in death. The necropsy showed a small brain, chiefly anomalous in the extreme lack of development of the whole right cerebral and cerebellar hemispheres, with a consequent distortion of the left hemisphere. The longitudinal fissure of the brain describes a

curved course, its concavity is toward the atrophied hemisphere. The volume of the right hemisphere is approximately a third of that of the left. The same is true of the cerebellum. The convolutions are entirely anomalous in both hemispheres.

Dr. Wm. C. Krauss presented a paper with the title
A RECEPTACLE FOR HARDENING HUMAN BRAINS.

Dr. Charles W. Burr read by title

A CASE OF PSYCHIC ANESTHESIA.

B. C. was twenty-four years old when he presented himself to Dr. Burr for treatment. When he was about ten years old he was accidentally struck on the side of the head by an axe handle with such force that he was thrown into a river, on the bank of which he had been standing. Examination of the head showed that he had a simple depressed fracture of the right parietal bone over the motor area. He remained in a state of alternate coma and delirium for about three weeks. On recovering consciousness he found himself partially paralyzed on the left side of the body and face, and completely anesthetic upon the same side. The palsy and anesthesia entirely passed away in a few months, sensation returning before motion. He was supposed to have recovered completely, until, on putting his left hand into his coat pocket for the first time after his illness, he discovered that he could not tell what he had in his grasp, though he had preserved the sense of touch. Little attention was paid to this symptom at the time, and he was told that it would soon pass away; but it has not done so.

The present examination shows that he is a fairly healthy-looking man, though neurotic, supersensitive and morbid. The left leg, arm and face are slightly smaller than the right. There is no palsy of either side of the body, but the left hand is used a little awkwardly. The gait and station are normal. The knee-jerks are equal and a little exaggerated. There is no depression or pain on pressure at the seat of the alleged fracture. Pressure on

the vertex over an area about as large as a one-cent piece causes mental confusion, a condition of dreaminess, and, if long continued, light hypnotic sleep. With the eyes shut he recognizes well variations in the positions of the hands or arms. Tactile sense is normal on both sides, except that on the entire left side, even on the finger tips, he fails to localize touch. He is absolutely unable to recognize any object put into his left hand, but knows that he is grasping something. His grasp is good, and remains good when the eyes are shut, there being no muscular relaxation even after several minutes. There is no sensory trouble in the right hand. On both sides the temperature and pain senses are normal, and he can distinguish dull objects from sharp ones. There is no difficulty with speech, vision, hearing, taste or smell. The urine is normal. Examination of the thoracic and abdominal viscera is negative. There is a partial reversal of the color fields.

This case differs from similar ones in the loss of the ability to localize sensation, and this, the writer believes, stands in causal relation to the failure to recognize objects by touch. He regards the case as probably one of hysteria.

Dr. Smith Baker read a paper, entitled:

STEPS TOWARD INSANITY.

He stated that recent studies of the neuron seem to indicate that the biological doctrine that activity determines structure, and thus, in turn, determines function, may be applied to the causation of insanity. The rule seems to be that exhaustion of the brain cells comes first, then acute intoxication, and finally, structural changes as the result of these conditions. The major premise of every study of the causation of insanity may be assumed to be this, viz.: every pathopsychical manifestation in the individual is evidence of neuronc structural defect, and until otherwise proved, every neuronc structural defect should be regarded as evidence more or less conclusive of remote untoward influence primarily on the part of ancestry. The neuronc defect itself, according to Van Gieson, may always be regarded as a true parenchymatous degeneration, involving not only the cells proper, but primarily their

ultimate protoplasmic expansions and "contact granules" (Andriezen). With reference to the steps by which vesania is initiated, we must look to ancestry for the first ones. Marriage of unmarriageable parties results in certain tensions and stresses which lead to arrests and perversions of development on the part of children. These, not generally presenting evidences of vesania themselves, carry over to succeeding generations their own hereditary defects of structure and function, and in the latter they become intensified and eventually break out in pathopsychical manifestations. Probably one-third of all marriages are of a character which necessitates a bad prognostication as regards progeny. Again, overstrain, worry, nutritional perversions, and toxemia resulting from these during the child-bearing period, are other sources of vesanic predisposition. The same should be said of the inadequate training to which so many children are subjected. Accidents, diseases and emergencies serve as exciting causes chiefly where birth, nurture and education, singly or combined, have been deficient. All this suggests a prophylactic pedagogics founded upon neurological conclusions.